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PTO/SB/21 (08-00)

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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application No.	10/057,591
	Filing Date	January 25, 2002
	First Named Inventor	George Forester
	Group Art Unit	2854
	Examiner Name	Not Assigned
Total Number of Pages in This Submission	Attorney Docket Number	5298P001

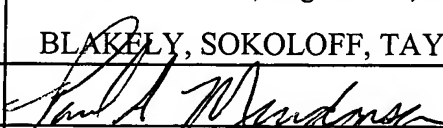
ENCLOSURES (check all that apply)

☒ Fee Transmittal Form☐ Fee Attached☐ Amendment / Response☐ After Final☐ Affidavits/declaration(s)☐ Extension of Time Request☐ Express Abandonment Request☐ Information Disclosure Statement☐ Certified Copy of Priority Document(s)☐ Response to Missing Parts/Incomplete Application☐ Response to Missing Parts under 37 CFR 1.52 or 1.53☐ Assignment Papers (for an Application)☐ Drawing(s)☐ Licensing-related Papers☒ Petition☐ Petition to Convert a Provisional Application☐ Power of Attorney, Revocation Change of Correspondence Address☐ Terminal Disclaimer☐ Request for Refund☐ CD, Number of CD(s)☐ After Allowance Communication to Group☐ Appeal Communication to Board of Appeals and Interferences☐ Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)☐ Proprietary Information☐ Status Letter☒ Other Enclosure(s) (please identify below):

- Declaration of George Forester (1 pp)
- Petition to Make Special (1 pp)
- Petition to Make Special for Pending Application (9 pp)
- 6 Cited References
- Return Receipt Postcard

Remarks

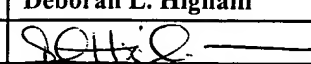
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Paul A. Mendonsa, Reg. No. 42,879 BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
Signature	
Date	April 17, 2002

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCEFEE TRANSMITTAL
for FY 2002

Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27.

TOTAL AMOUNT OF PAYMENT (\$) 0.00

Complete if Known

Application Number	10/057,591
Filing Date	January 25, 2002
First Named Inventor	George Forester
Examiner Name	Not Assigned
Group/Art Unit	2854
Attorney Docket No.	5298P001

METHOD OF PAYMENT (check one)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None
☒ Deposit Account

Deposit Account Number

02-2666

Deposit Account Name

Blakely, Sokoloff, Taylor & Zafman LLP

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any overpayments
☐ Charge any additional fee(s) during the pendency of the application
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account

FEE CALCULATION

1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
101	740	201	370	Utility filing fee	
106	330	206	165	Design filing fee	
107	510	207	255	Plant filing fee	
108	740	208	370	Reissue filing fee	
114	160	214	80	Provisional filing fee	
SUBTOTAL (1)				(\$)	

2. EXTRA CLAIM FEES

Total Claims	26	26*	=	0	X	9.00	=	\$0.00
Independent Claims	5	5*	=	0	X	42.00	=	\$0.00
Multiple Dependent								

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
103	18	203	9	Claims in excess of 20	
102	84	202	42	Independent claims in excess of 3	
104	280	204	140	Multiple Dependent claim, if not paid	
109	84	209	42	**Reissue independent claims over original patent	
110	18	210	9	**Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)				(\$)	0.00

*or number previously paid, if greater, For Reissues, see below

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for ex parte reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	400	216	200	Extension for reply within second month	
117	920	217	460	Extension for reply within third month	
118	1,440	218	720	Extension for reply within fourth month	
128	1,960	228	980	Extension for reply within fifth month	
119	320	219	160	Notice of Appeal	
120	320	220	160	Filing a brief in support of an appeal	
121	280	221	140	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,280	241	640	Petition to revive - unintentional	
142	1,280	242	640	Utility issue fee (or reissue)	
143	460	243	230	Design issue fee	
144	620	244	310	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Processing fee under 37 CFR 1.17(q)	
126	180	126	180	Submission of Information Disclosure Statement	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))	
179	740	279	370	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

(\$)

SUBMITTED BY

Name (Print/Type)

Paul A. Mendonsa

Registration No.
(Attorney/Agent)

42,879

Telephone

(503) 684-6200

Signature

Date

04/17/02

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PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Forester

Application No: 10/057,591

Filed: January 25, 2002

For: DISTAL CHORDING KEYBOARD

Examiner: Not Assigned

Art Unit: 2854

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PETITION TO MAKE SPECIAL

Dear Sir:

Applicant hereby petitions under 37 C.F.R. § 1.102(c) to advance the above-referenced application for early examination. As set forth in 37 C.F.R. § 1.102(c), when the petition to make special is because of the age of the Applicant, there is no fee for the petition.

This petition is supported by the enclosed Declaration by the inventor, George Forester.

Respectfully submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN, LLP

Date: APRIL 15, 2002

Paul A. Mendonsa
Paul A. Mendonsa
Attorney for Applicant
Reg. No. 42,879

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(503) 684-6200

17 APRIL 2002
Date of Deposit

DEBORAH L. HIGHAM
Name of Person Mailing Correspondence

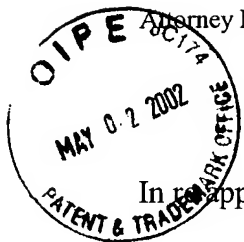
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PATENT .

Attorney Docket No.: 005298.P001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re application of:

Forester

Application No: 10/057,591

Filed: January 25, 2002

For: DISTAL CHORDING KEYBOARD

Examiner: Not Yet Assigned

Art Unit: Not Yet Assigned

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DECLARATION

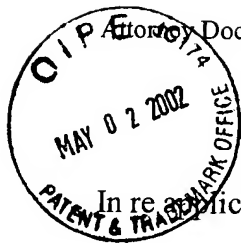
I, George Forester, hereby declare under penalty of perjury of the laws of the United States of America that I am over sixty-five (65) years of age.

Date: 4/15/02

By:

George Forester

Attorney Docket No.: 005298.P001



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Forester

Application No: 10/057,591

Filed: January 25, 2002

For: DISTAL CHORDING KEYBOARD

Examiner: Not Assigned

Art Unit: 2854

Assistant Commissioner For Patents
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PETITION TO MAKE SPECIAL FOR PENDING APPLICATION
[37 C.F.R. § 1.102(c)]

Dear Sir:

This petition is submitted according to 37 C.F.R. § 1.102(c).

Advanced examination and processing of the above-identified patent application is respectfully requested under 37 C.F.R. § 1.102(c). Accordingly, Applicant has taken appropriate steps to comply with the special examining procedures set forth in the MPEP.

1. This petition to make special is accompanied by a signed declaration by Applicant, evidencing that Applicant is 65 years of age, or more. Accordingly, no fee is required as set forth in 37 C.F.R. § 1.102(c).

2. Applicant submits that the claims presented in the above-referenced application are all directed to a single invention. Should, however, the Office determine that all of the claims are not obviously directed to a single invention, Applicant hereby states that he will make an election without traverse to satisfy the prerequisite to the grant of special status.

3. A pre-examination search has been made. A list of the field of search by class and subclass, publication, Chemical Abstracts, foreign patents, and other prior art related materials are attached to this document.

4. A copy of each of the references deemed most closely related to the subject matter encompassed by the claims is attached to this petition.


5. A detailed discussion of the references, with the particularity required by 37 C.F.R. § 1.111 (b) and (c) is attached to this document. The detailed discussion includes a discussion of how the claimed subject matter is patentable over the references.

The Applicant therefore respectfully requests that this Petition to Make Special be granted and that examination of the present application be advanced to the fullest extent possible.

Please charge any shortages and credit any overcharges to our Deposit Account number 02-2666. The Examiner is invited to contact the undersigned by telephone if such contact would facilitate the processing of this petition.

Respectfully submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN, LLP

Date: April 15, 2002


Paul A. Mendonsa
Attorney for Applicant
Reg. No. 42,879

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Seventh Floor
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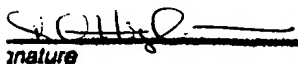
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Name of Person Mailing Correspondence


Signature

4/17/02
Date

Application No.: 10/057,591

Attorney Docket No.: 005298.P001

-2-

Art Unit: 2854

PRE-EXAMINATION SEARCH

The following is a list of the field of search by class and subclass, publication, Chemical Abstracts, foreign patents, and other prior art related material:

178/17R, 200/5A, 200/6A, 235/146, 340/365R, 340/711, 341/20, 341/21, 341/22, 341/23, 341/24, 341/26, 345/168, 361/686, 364/709.12, 400/100, 400/101, 400/472, 400/479, 400/485, 400/486, 400/489, 708/130, 708/145, 708/146

The resulting searches provided a list of related patents, none of which was exactly on point. The following list includes the patents most related to the present invention.

600,119	Mar., 1898	Cahill	400/101
2,318,519	May, 1943	Palanque	400/482
3,022,878	Feb., 1962	Seibel, et al.	400/479
3,034,717	May, 1962	Werner	235/146
3,428,747	Feb., 1969	Alferieff	178/23
4,005,388	Jan., 1977	Morley, et al.	340/172.5
4,007,443	Feb., 1977	Bromberg, et al.	708/146
4,490,056	Dec., 1984	Whitaker	400/100
4,502,038	Feb., 1985	Lowenthal, et al.	340/365 S
4,555,193	Nov., 1985	Stone	400/486
4,584,443	Apr., 1986	Yaeger	200/6 A
4,680,572	Jul., 1987	Meguire, et al.	341/24
4,791,408	Dec., 1988	Heusinkveld	340/365 R
4,831,218	May, 1989	Wright	200/5 A
4,846,598	Jul., 1989	Livits	400/472
4,891,777	Jan., 1990	Lapeyre	364/706
4,913,573	Apr., 1990	Retter	400/489
4,971,465	Nov., 1990	Hashimoto	400/485
5,087,910	Feb., 1992	Guyot-Sionnest	340/711
5,128,672	Jul., 1992	Kahler	341/23
5,189,416	Feb., 1993	Estes	341/26
5,267,181	Nov., 1993	George	364/709.12
5,270,709	Dec., 1993	Niklsbacher	341/20
5,432,510	Jul., 1995	Matthews	341/20
5,487,616	Jan., 1996	Ichbiah	400/489
5,493,654	Feb., 1996	Gopher, et al.	341/22
5,515,305	May, 1996	Register, et al.	364/709.15
5,552,782	Sep., 1996	Horn	341/22
5,642,108	Jun., 1997	Gopher, et al.	341/22
5,790,103	Aug., 1998	Willner	345/168

Application No.: 10/057,591
Attorney Docket No.: 005298.P001

-3- These ref. are Art Unit: 2854
on #1449 Form #paper 2.

5,793,312	Aug., 1998	Tsubai	341/22
5,822,546	Oct., 1998	George	395/281
5,828,323	Oct., 1998	Bartet	341/22
5,924,803	Jul., 1999	Curtin, IV, et al.	400/100
5,982,303	Nov., 1999	Smith	341/22
5,984,548	Nov., 1999	Willner	400/472
6,108,200	Aug., 2000	Fullerton	361/686
6,164,853	Dec., 2000	Foote	400/489
6,184,803	Feb., 2001	Burrell, IV	341/22
6,184,804	Feb., 2001	Harrison	341/22
6,232,892	May, 2001	Burrell, IV	341/22
6,297,752	Oct., 2001	Ni	341/22

The publications searched include the following websites:

www.delphion.com
www.tifaq.com
www.lsi.usp.br
www.e2solutions.com/dataegg/
www.handkey.com

Each site was searched for concepts relating to keyboards, including ergonomic designs, one-handed, and chording keyboards.

A copy of each of the references deemed most closely related to the subject matter encompassed by the claims is attached, if the references are not already of record.

DETAILED DISCUSSION OF THE REFERENCES

A data input device, such as a keyboard, is a device that produces alphanumeric characters based on key presses of a user. The present standard for keyboards is the QWERTY keyboard, so named for the first letters of the top row of letters on the keyboard. A standard QWERTY keyboard generally produces one character per keystroke, with some characters produced when a Shift, Control, and/or Alt key is pressed in combination with a key. Thus, a QWERTY keyboard requires a relatively large number of keys (QWERTY keyboards typically have more than 80 keys) to produce alphanumeric input. It is difficult to provide today's smaller

portable device with a usable keyboard that requires so many keys. The QWERTY keyboard also typically uses a planar layout, causing concern for injury from excessive repetitive use. Many keyboards have been conceived to provide a smaller, more ergonomic device for data input.

The references listed above reflect many concepts in keyboarding improvements. One such concept is that of chording, or producing alphanumeric character input from keystrokes of multiple keys in combination. The concept of a chording keyboard has been around for many years. A QWERTY keyboard is not a chording keyboard because it typically requires a single keystroke to produce a single alphanumeric character. Many of the data input devices of the references listed are chording keyboards, using a variety of chording schemes.

Another keyboarding concept is the choice of key configuration. The QWERTY keyboard layout is designed to keep the most-used characters away from each other, rather than basing the layout on ease-of-use of the user. Some of the references above provide examples of keyboards that use a key configuration based on the frequency of use of characters in American English. Many other references provide examples of key layout configurations based on ease of learning where keys are, rather than producing the most-used characters with easiest fingering positions.

Another concept is that of placing the keys on a distal side of the keyboard. A distal-side keyboard is in contrast to a proximal-side keyboard. On a proximal-side keyboard the keys of the keyboard face the user during normal operation. Most of the references listed above are proximal-side data input devices. A distal-side keyboard is one which is designed to be used such that in normal operation the keys of the keyboard are on a side of the keyboard facing away

from the user. There are some devices described in the references listed above that use the concept of placing the keys on a distal side of the keyboard.

The most relevant of the references listed above are chording data input devices that combine the concepts of distal-side operation and/or key layout based on frequency of use.

However, the data input device described in the present invention is patentably distinguishable from any of the references listed above. Claim 1 recites:

1. A data input device comprising:
 - a first plurality of keys disposed within a first portion of a housing on a first side, such that when a user's thumb is placed on a second side, the user's remaining fingers can be placed on one or more of the first plurality of keys, the first plurality of keys to provide alphanumeric character input; and
 - a second plurality of keys disposed within a second portion of the housing on the first side and substantially aligned with the first plurality of keys, the second plurality of keys to provide control functionality.

Thus, Applicant claims a data input device that provides alphanumeric character input with a first plurality of keys on a first side, and control functionality with a second plurality of keys on the first side. Claim 17 includes providing alphanumeric character input with a first plurality of keys on a first side, and control functionality with a second plurality of keys on the first side, as well as arrangement of the two pluralities of keys. Claim 22 includes providing alphanumeric character input with a first plurality of keys, and control functionality with a second plurality of keys, with the first and second pluralities of keys being disposed in a separate first and a second housing, respectively. Claims 2-16, 18-21, and 23-27 depend from claims 1, 17, and 22, respectively.

Applicant respectfully submits that none of the references listed above discloses a plurality of keys on a first side to provide control functionality, both function key input and cursor control. Furthermore, Applicant respectfully submits that no reference, or combination of

references listed above teaches or suggests using a second plurality of keys with a user's second hand to provide control functionality with the data input device.

The following includes discussion of prior art references that are more relevant to the present invention, and are illustrative of the deficiencies of the prior art.

U.S. Patent No. 6,297,752 B1 issued to Ni (hereafter "*Ni*") discloses a keyboard device using two handed input on a QWERTY keyboard, where the keyboard is separated into a section to be operated by the left hand and another section to be operated by the right hand. See Figure 1; Figure 2. *Ni* also teaches an embodiment where the keyboard sections are operated on a distal side. However, *Ni* is limited to a QWERTY keyboard, and therefore does not teach or suggest a first plurality of keys to provide alphanumeric character input and a second plurality of keys to provide control functionality. Therefore, *Ni* does not anticipate the present invention.

U.S. Patent No. 6,232,892 B1 issued to Burrell, IV (hereafter "*Burrell*") discloses a one-handed chording keyboard device for providing "alphabetic data characters including a space." See, for example, column 10, lines 56-63. However, *Burrell* does not teach or suggest a second plurality of keys to provide control functionality. Therefore, *Burrell* does not anticipate the present invention.

U.S. Patent No. 5,515,305 issued to Register et al. (hereafter "*Register*") discloses a two-handed chording keyboard for a Personal Digital Assistant (PDA). See column 2, lines 6-24; column 4, lines 17-34. *Register* also discloses a pointing device to operate a pointer on a visual display on the PDA. See column 4, lines 44-64. However, *Register* does not teach or suggest a second plurality of keys to provide control functionality. Therefore, *Register* does not anticipate the present invention.

U.S. Patent No. 5,432,510 issued to Matthews (hereafter "*Matthews*") discloses a one-handed data input device that uses chording techniques to provide data input. See, column 5, lines 3-10. *Matthews* also teaches the possibility of using a second device in the second hand to provide character input using both hands. However, using two devices in tandem is contemplated for the purpose of providing ASCII character input from the two devices operating in conjunction. See column 6, lines 22-28; column 16, lines 17-45. *Matthews* does not teach or suggest, however, a second plurality of keys to provide control functionality. Therefore, *Matthews* does not anticipate the present invention.

Other references disclose the "Data Egg," by Gary Friedman, and the "Twiddler," by Handkey Corp. The "Data Egg" is disclosed on the web site located at <http://www.e2solutions.com/dataegg/index.html>. The "Data Egg" is a similar product to the device disclosed in *Matthews*, and was distinguished in *Matthews*. The "Data Egg" discloses a chording data input device to provide ASCII character input. In addition, the "Data Egg" contemplates the inclusion of the mechanical aspects of the "Data Egg" into a cellular phone, to enable a cell phone to receive ASCII character input. However, the "Data Egg" fails to teach or suggest a second plurality of keys to provide control functionality. Therefore, the "Data Egg" does not anticipate the present invention.

The "Twiddler," disclosed at <http://www.handkey.com>, also distinguished by *Matthews*, discloses a chording, single hand data input device to provide alphanumeric data input. The "Twiddler" is limited to a device that uses six keys operated by the thumb of the hand operating the "Twiddler" keypad. The "Twiddler" also discloses a mechanism within the housing of the data input device that operates cursor control. However, the "Twiddler" fails to teach or suggest a second plurality of keys to provide control functionality. The mechanism to provide cursor

control is not a second plurality of keys to provide control functionality. The six thumb keys are not disposed within a second portion of the housing on the same side of the device as the keypad, and substantially aligned with the keypad. Therefore, the "Twiddler" does not anticipate the present invention.

Therefore, Applicant submits that none of the references discussed herein teaches or suggests the invention as claimed. Furthermore, Applicant submits that no combination of the references discussed herein suggests the use of a first plurality of keys on a first side to provide alphanumeric character input, and a second plurality of keys on the first side to provide control functionality. Thus, Applicant respectfully submits that no reference or combination of references listed teaches or suggests the invention as claimed in claims 1-27.

Introducing the Data Egg



THE DATA EGG IS YOUR PERSONAL INFORMATION APPLIANCE!



Imagine having access to the whole world of information in your hand - everywhere, anytime.

2-way alphanumeric pager, e-mail, phone book, calendar, notepad, and to-do lists. Now imagine that you can access this information AND CAPTURE NOTES AND IDEAS anytime, anywhere -- even while walking, driving, running, lying down, or even waiting in line at the airport.

- NO MORE tiny, klutzy keyboards that are inaccessible even when seated at a desk!
- Instantly accessible - wears like a 2-way pager, but works like a pocket organizer: all in the palm of your hand!
- Capture information faster than any other pocket organizer -- including V-Pal, PalmPilot, PalmPilot, and Newton!
- Extremely easy to use - most people learn the alphabet in only a few hours.

In a nutshell, the Data Egg is the answer to the current trend of continuously shrinking portable devices -- 2-way pager, pocket organizers, for example -- all of them too small to use, and none of them accessible unless you're sitting down and anchored to a desk.

Originally developed by Gary Friedman of NASA's Jet Propulsion Laboratory as a keyboard for astronauts, the Data Egg is now poised to forge the next wave in Portable Information Appliances. Having solved the keyboard barrier problem, the Data Egg is the first time will enable the merger of 2-way pager, phone book, notepad, calendar, e-mail, alarm clock, language translator, and a host of other specialized functions into a single, small, portable device that can be used in a PalmPilot, V-Pal, or Newton. The Data Egg is a truly revolutionary device that can be used in a PalmPilot, V-Pal, or Newton. The Data Egg is a truly revolutionary device that can be used in a PalmPilot, V-Pal, or Newton.

The Data Egg's "keyboard" consists of seven buttons (3 for the thumb, 1 for each of the remaining fingers) wrapped around a shape that's easy for the hand to hold.

The seven buttons are pressed in different combinations, much like playing chords on a piano (hence the name 'chording'), and can be used to type all letters, all numbers, all punctuation -- pretty much anything one can type on a typewriter. The Alphabet is also easy to learn since the shapes of the letters resemble the button patterns that are pressed. The first physical prototype had the buttons mounted onto an Easter egg, hence the name 'Data Egg' was born.

The applicability of the Data Egg to everyday tasks is unending; and properly marketed, the Egg can have the same impact on society as have the microwave oven, the pager, credit card, and the spreadsheet.

Built-in Applications

Although having all of these features in one unit might be overkill, a Data Egg implementation could sport any or all of the following features:

<ul style="list-style-type: none"> • Built-in alphanumeric pager (with automatic cross-referencing of names on numeric pages): respond via built-in keyboard. 	<ul style="list-style-type: none"> • Packet Radio interface: download an upload e-mail messages in the background; answer messages while waiting in line at the airport.
<ul style="list-style-type: none"> • Foreign Language translator: type a sentence in the language; a translation appears on the screen. 	<ul style="list-style-type: none"> • Complete phone book, including reverse-search phone book file, so you can cross-reference one party against many.
<ul style="list-style-type: none"> • Simple e appointment calendar, synchronizable with your PC. 	<ul style="list-style-type: none"> • Calculator, including foreign currency exchange.
<ul style="list-style-type: none"> • Games, & other educational pursuits. 	<ul style="list-style-type: none"> • "Tethered" keyboard emulation function, either via infrared or tethered serial port
<ul style="list-style-type: none"> • Track your hours and activities meticulously. Great for lawyers and others who must account for their time in billable increments; submit reports but also 	<ul style="list-style-type: none"> • Automatic Touch tone dialing - type in name (or recall page), hold button, phone to dial out via sound. Will even include touch tone speed sequences.
<ul style="list-style-type: none"> • ... 	<ul style="list-style-type: none"> • ...
<ul style="list-style-type: none"> • Golf or other multi-team sports score keeper 	<ul style="list-style-type: none"> • Handy thesaurus/spell checker program
<ul style="list-style-type: none"> • Includes a facility for automatically spelled words 	<ul style="list-style-type: none"> • Sort ideas on the fly and view by category later.
<ul style="list-style-type: none"> • Grocery shopping mode for Egg - check off items, keep running cost total 	<ul style="list-style-type: none"> • Running and self-sorting to-do list

Examples of products that desperately need to incorporate Data Egg Technology.

Additional Possible Applications (Including the Bedridden and Web Surfing Workstations.)

How can the Data Egg help The Chording Alphabet

How can the Data Egg help Repetitive Stress Injury (RSI) or Carpal Tunnel Syndrome?

Other Frequently Asked Questions (FAQ)

History of the Data Egg

Marketing Challenges

I want one!! / I want to invest!!

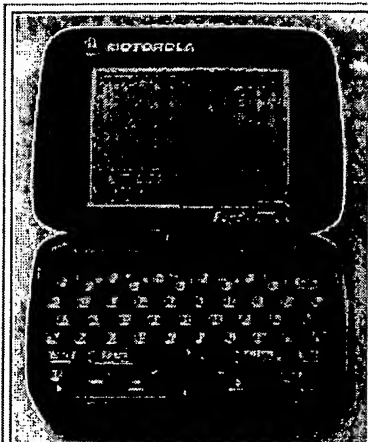
E-mail to info@e2solutions.com



Originally designed for orbital use, the Data Egg has many down-to-earth applications for position-independent activities.

Products that really need a Data Egg interface

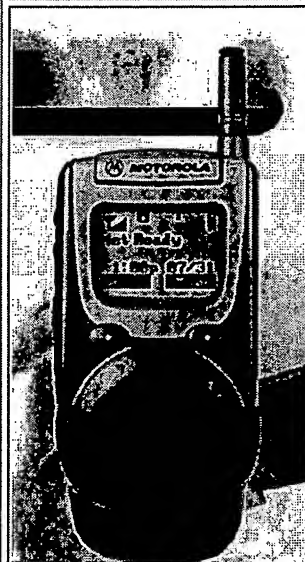
Presented here is a gallery of modern applications which are simply crying for a Data Egg interface. The ironic thing is, if you polled any regular users of these products and ask them for feedback, none of them would identify the cumbersome text entry scheme as being a problem.



The PagerWriter (fig.) from Motorola was the first attempt at a clam, slipcase pager, targeted for e-mail use. To respond to an e-mail, the user must stop what they're doing, find a flat surface, sit down and then hunt and peck very slowly. The need for a keyboard made the unit substantially larger than it needs to be.



Same deficiencies as above. They're also too big for the hand, and the screen is too small to read.

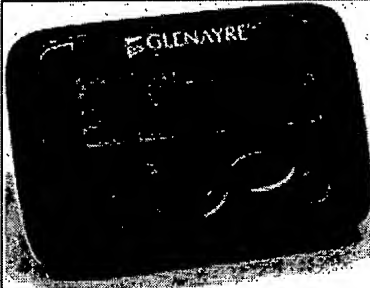


This is the first digital phone with an on-IT address. It can do voice, text, FAX, and even sports a micro-Web browser. Notice how the keyboard both usurps valuable surface area and makes typing nearly impossible all at the same time. The display is the least useful thus far.

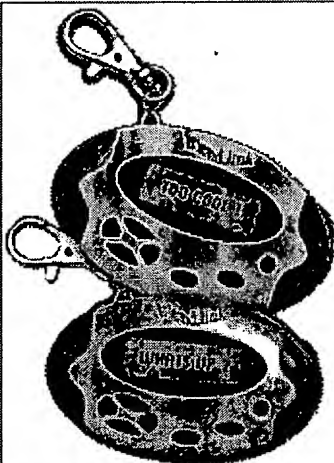
Now imagine an LCD gives the wrong time, or the phone's Data Egg is too small to use on its side edges. They could make the display size and make the device much more useful.



The PalmPilot from 3Com. Great for retrieving wireless information. Miserable at capturing it.



The AccessLink II pager from Glenayre. A complete 2-way alphanumeric pager. Not a lack of a keyboard; messages must be meticulously spelled-out via picking from a menu of letters with the cursor keys - similar to entering your initials at the end of a video game. Neither efficient, nor convenient.



The Triandl Initiator 3000 pager. A complete 2-way alphanumeric pager. Not a lack of a keyboard; messages must be meticulously spelled-out via picking from a menu of letters with the cursor keys - similar to entering your initials at the end of a video game. Neither efficient, nor convenient.



Ahhh...That's the ticket. The perfect combination of portability and usability. Position independent writing that lets you keep your eyes on the road, or a beautiful sunset while on a leisurely walk, or just a sunset.

[Back to Main Page](#)

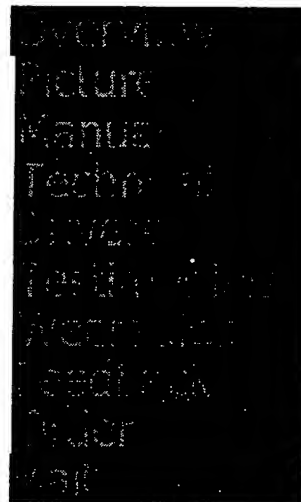
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Twiddler2

Welcome to Handykey Corporation, makers of the Twiddler™. A combination keyboard and mouse that weighs 4 ounces and fits in the palm of your hand. The Twiddler™ is an enabling technology of wearable computing.

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Last Update: October 4, 2000



TWIDDLER:

The Twiddler is a pocket-sized mouse pointer plus a full-function keyboard in a single unit that fits neatly in either right or left hand. It plugs into both keyboard and serial ports on IBM-compatible PC's and works on DOS, Microsoft Windows 3.X/95/NT, Unix, and Palm Pilot operating systems. Combining major innovations in pointer and keyboard technology, the twiddler is designed to bring renewed enjoyment to current computer users and to attract newcomers to the world of personal computing.

MOUSE:

The Twiddler's mouse pointer is based on a new concept - a sensor, sealed inside the unit and immune to the ravages of dust and dirt. To get a feel for how it works, make a fist with your thumb on top. Now, extend your index finger; then rock your hand back and forth and tip it from side to side. If you were pressing the mouse button with your thumb, pointer on the screen would follow the motion of your index finger! After you've tried it, you'll see how easy and natural it becomes.

KEYBOARD:

The Twiddler incorporates a keyboard which is radically new - an ergonomic keypad designed for "chord" keying. This means you press one or more keys at a time. Each key combination generates a unique character or command. With 12 finger keys and 6 thumb keys, the twiddler can emulate with ease the 101 keys on the standard keyboard... plus many more. Imagine! A pocket-sized, touch-typable unit with more power than a full-sized keyboard.

The Twiddler is a truly personal mouse and keyboard that goes with you just about anywhere.

HANDYKEY CORPORATION

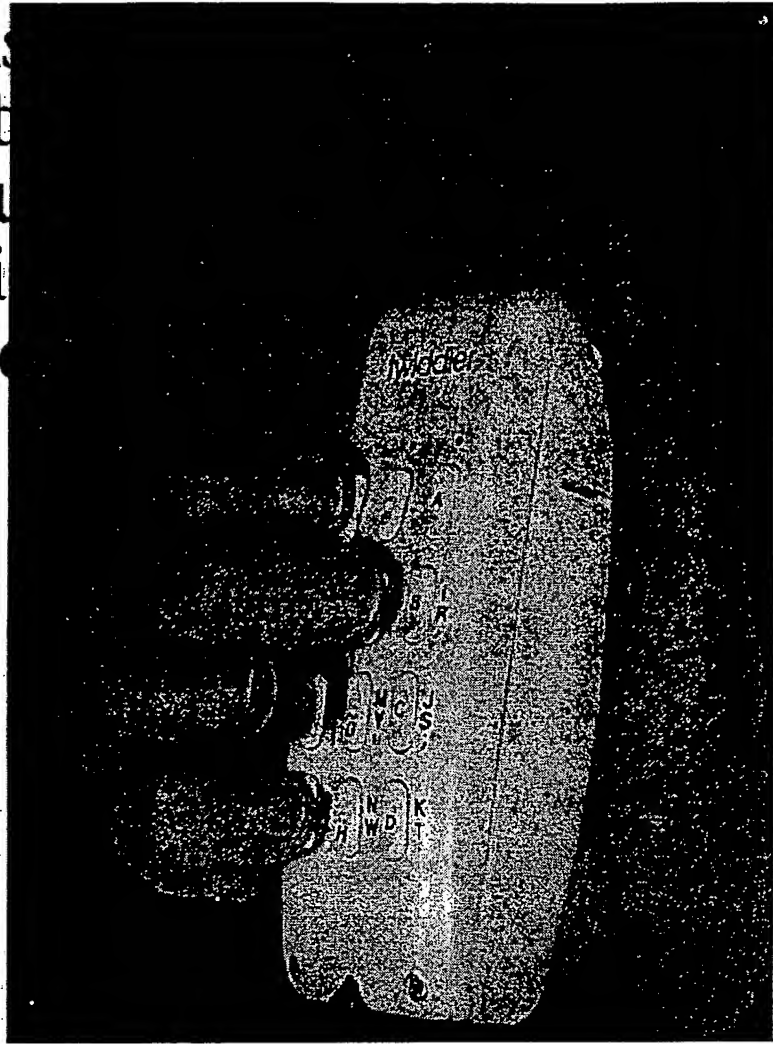
Advantages:

- No mouse pad, desktop, or any surface at all needed for operation. This mouse flies!
- Twiddler's sealed sensor can't be fouled by the dust and dirt that shorten the life of ordinary mice and trackballs.
- At last, touch-type on a pocket-sized keyboard!
- Stores within easy reach, on the side of your monitor or notebook computer.
- Can be used as an auxiliary keyboard, varying the potential stress from repetitive motions.
- Eliminates tedious switching back and forth between mouse and keyboard.
- Includes a "joystick" mode for many mouse-driven games.
- Adds the speed of keyboard text entry to PDAs and slate-PC's.
- Three year warranty.



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